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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/565,837 | 01/25/2006 | Young-Goo Song | ABI555US | 7654 |
| 33605 7590 06/09/2009 | | | | |
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| EXAMINER | | | | |
| KIM, RICHARD H | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2871 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,837

Applicant(s)

SONG ET AL.

Examiner

RICHARD H. KIM

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-7,9,11-13,15,17,18,20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,9,11-13,15,17,18,20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/29/09 has been entered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(c) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 18, 20 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 6,859,254 B2),

3. Re claims 1, 7, 13 and 18, Kim et al. discloses a device and method in Figure 5D comprising an array substrate including a transparent substrate (103) including a display region that displays an image, a peripheral region having a driving circuit (column 2, line 65) for displaying an image through the display region, and a sealine region (122) that surrounds the display region to define the display region and the peripheral region; a first insulation layer (137) formed over the transparent substrate, the first insulation layer having an opening window in the sealine region; a pixel electrode (138) formed on the first insulation layer of the display region; and a second insulation layer (139) disposed between the first insulation layer and the transparent substrate, wherein the opening window extends through the first insulation layer to the second insulation layer; a color filter substrate facing the array substrate; a liquid crystal layer interposed between the array substrate and the color filter substrate (col. 7, lines 22-27); and a sealing member (122) formed at the opening window to bond the array substrate and the color filter substrate.

4. Re claims 3, 5, 9, 11, 15, 17, 20 and, 22 Kim et al. discloses that the first insulation layer corresponds to an organic layer (col. 5, line 52-53) and the second insulation layer corresponds to a silicon nitride layer (SiNx) (col. 6, line 16), respectively.

5. Claim 6 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,859,254 B2) in view of Kim et al. (US 2004/0036815 A1).

6. Kim et al. (US 6,859,254 B2) discloses the device previously recited, and further disclose the device comprising a switching device having a gate electrode (131), a drain electrode (136)

that is electrically connected to the pixel electrode (138) and a source electrode (136), a gate line (11) electrically connected to the gate electrode, and a data line (13) that is electrically connected to the source electrode. However, the reference does not disclose that a portion of the data line overlaps with the pixel electrode.

7. Kim et al. (US 2004/0036815 A1) discloses a device wherein a portion of the data line (115) overlaps with the pixel electrode (120).

8. It would have been obvious to one having ordinary skill in the art at the time the invention was made for a portion of the data line to overlap with the pixel electrode since one would be motivated to reduce image deterioration (paragraph 15).

9. Claim 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,859,254 B2).

10. Kim et al. discloses the device previously recited, but fails to disclose that the liquid crystal layer is injected between the array substrate and the color filter substrate by a vacuum injection method.

11. It would have been obvious to one having ordinary skill in the art at the time the invention was made for the liquid crystal layer to be injected between the array substrate and the color filter substrate by a vacuum injection method. Examiner take Official Notice that injecting the liquid crystal layer using a vacuum injection method is well known in the art as an efficient and reliable means to forming the liquid crystal layer.

12. Claim 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al in view of Kwak et al

13. Kim et al. discloses the device previously recited, but fails to disclose that the opening window comprises at least one intermediate portion of the first insulation layer positioned in between the interior edges of the opening window.

14. Kwak et al. discloses a device comprising at least one intermediate portion of the first insulation portion in between the interior edges of the opening window (Fig. 8, ref. 28).

15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ at least one intermediate portion of the first insulation portion in between the interior edges of the opening window since one would be motivated to increase the contact surface area of the sealant and the insulation layer thereby improving adhesion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD H. KIM whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard H Kim/
Primary Examiner, Art Unit 2871